

The future of artificial intelligence: What will it take to revolutionize clinical care?



In addition to Andy Zook, VP at InterSystems and moderator Russ Branzell, President and CEO of CHIME, roundtable participants included:

Scott MacLean
Senior VP and CIO
Medstar Health

Aaron Miri
Senior VP and CD&IO
Baptist Healthcare System

Mark Clark
VP of Information Technology
UCHealth

Pete Daddio
Director of Technology
Moffitt Cancer Center

Debra Carpenter
CIO
TriState Health

Pankaj Chordia
Director, Network of Care
Stanford Healthcare

Yuri Campbell
Senior Director of Clinical
Solutions Delivery
WellMed Medical Management,
Optum South Region

**A Senior VP and CIO at a
major children's hospital in
the Northeast**

Puneet Singh
Administrative Director of
Clinical Operations
Stanford Healthcare

INTRODUCTION

Artificial intelligence (AI) is speeding along at an unprecedented rate, and healthcare systems across the nation have eagerly strapped in for the ride. Enthusiasm for AI-driven tools, including generative AI applications, has skyrocketed over the past several years, and it hasn't taken long for these models to find their way onto the front lines of clinical care.

But as with any exciting and promising technology, there are potential bumps in the road ahead. Organizations must ensure they are leveraging AI in the most appropriate use cases while paying close attention to safety, reliability, and quality, especially as the ecosystem evolves around them.

Russell Branzell, President and CEO of CHIME, noted healthcare organizations face accelerating costs and thin operating margins combined with a shifting workforce — the next generations think, act, and work differently — and the startling fact there not be enough human beings to take on the jobs moving forward. “Between 8 and 15% of the U.S. workforce will disappear in the next five years,” he cautioned. “Those who figure out how to use AI in this landscape will thrive, while those who don't figure it out will not survive.”

For AI to truly revolutionize the delivery of healthcare, provider groups will need to find the right balance between automating suitable tasks while still keeping the heart and soul of the patient-provider relationship alive, said a panel of executive leaders in a recent Thought Leadership Roundtable hosted by CHIME.

“Healthcare has the potential to be a showcase for how to do artificial intelligence right,” asserted Andy Zook, VP at InterSystems, the sponsor for the event.

“There are so many opportunities to automate things that should be automated, but it's equally crucial to keep humans in the loop with decision-making. We have the chance to be an example to other industries about using AI for optimization without relinquishing the humanity and compassion that make high-quality healthcare so impactful, because AI is going to be one of those once-in-a-generation seismic shifts, just like the internet. It's time to get ready for a new way of doing things, which is very exciting.”

Together, the executives tackled tough questions about how AI is going to shape the future of healthcare and what needs to be done to ensure that technology helps rather than hinders the next generation of clinical care.

PERSPECTIVES ON AI IN THE HEALTHCARE ENVIRONMENT

Participants were generally optimistic about how the technology will fit into the real world of clinical care. While acknowledging the potential risks of getting it wrong, the executives unanimously believed that AI is going to be a fact of life sooner rather than later, and the best approach is to embrace it with an open mind and a clear plan.

“AI will enable us to transition repetitive, routine tasks that people do into something that a computer can do instead,” said Yuri Campbell, Senior Director of Clinical Solutions Delivery at Optum. “Since it’s coming whether we want it or not, we have to be very proactive about identifying where the risks lie and addressing them as safely as possible so we can leverage AI for its incredible opportunities.”

Scott MacLean, Senior VP and CIO at Medstar Health, echoed the sentiment of opportunity, emphasizing the transformative potential of generative AI and the importance of embracing the AI revolution. “We need to get on board,” he urged. “I’m optimistic about our ability to adapt and change to take advantage of what it has to offer.

Collaboration will be key to making AI work in clinical care, especially with so many new platforms, models, and algorithms available to choose from, advised Pete Daddio, Director of Technology at Moffitt Cancer Center. “It’s so easy to get lost with when you’re feeling on your own with it.”

To ensure the industry is successful with AI, it needs to be a co-journey with a very strong emphasis on collaborative governance and shared best practices. “Then we can advance in a uniform manner and learn from each other’s experiences to avoid duplicating efforts or fragmenting care,” Daddio assured.

ADDRESSING THE CHALLENGES OF AI IN THE CLINICAL SETTING

Those are just a few of the potential problems that await if the industry does not align around best practices for AI implementation, the panel noted. Despite their enthusiasm for new approaches, all the participants are preparing for some level of disruption — an inevitable byproduct of change.

Trust emerged as a significant concern for healthcare leaders as they navigate the early stages of AI adoption. Debra Carpenter, CIO at TriState Health, pointed to the novelty and perceived unreliability of AI as key factors contributing to this issue. She emphasized that organizations must proactively address these concerns through a “concerted approach to change management, education, and thought leadership” to foster trust and acceptance among clinicians and staff. “It’s going to be an evolution,” she stated, underscoring the need for organizations to adapt and grow alongside this trending technology.

There are growing concerns about AI replacing people in certain healthcare jobs. However, AI has the potential to revolutionize the industry by taking over mundane tasks while allowing healthcare professionals to focus on more complex and fulfilling aspects of their roles.

It’s important for organizations and leaders to find the right balance between AI and humans and manage this AI infusion from a cultural and business perspective. This leadership is particularly crucial in cases where automation will be disruptive to the traditional workflows and job descriptions of some roles.

A THOUGHT LEADERSHIP ROUNDTABLE
**The future of artificial intelligence:
What will it take to revolutionize clinical care?**



ADDRESSING THE CHALLENGES OF AI IN THE CLINICAL SETTING CONTINUED

Despite the potential operational efficiencies, healthcare organizations must be cautious about viewing AI as a way to completely eliminate the burdens associated with existing workflows, advised Aaron Miri, Senior VP and CD&IO at Baptist Healthcare System.

After implementing an EHR-generative AI integration in February to streamline communications with patients, his team found that while the tool helpfully shifted some work away from physicians, it still required significant investment from the IT staff.

The lesson is that AI can make some tasks easier, but it's not burden-free for the organization. For instance, Miri shared that a team had to constantly perform QA on the integrated tool due to consistent hallucinations.

"There are issues with the responses sounding not quite right to humans, and challenges with keeping qualified humans engaged in the right points of the conversation," he noted. "We don't want to create a situation where everything is so automated that the physicians end up not reading the communications at all."

"We used to say it takes about 17 years to adopt a new clinical best practice; AI is moving that needle to the other extreme. There are almost too many good ideas, tools, and products coming through the door now, and sometimes they cause friction with one another."

Mark Clark

VP of Information Technology
UCHealth

The take-home message here is that AI isn't a magic bullet for getting rid of work. "It can help redistribute work to make certain functions more efficient, but there will always be a cost involved," Miri advised. "A lot of organizations don't think about that ongoing back-end investment enough, and it could be a problem for them down the line."

Challenges are to be expected, especially with the sudden explosion of generative AI, but there is excitement all over healthcare that can drive great innovation if done right. For instance, Mark Clark, VP of Information Technology at UCHealth, is excited about the potential for AI and believes governance will be a key factor to addressing the pace of change that will become a disruption to traditional decision-making processes.

"We used to say it takes about 17 years to adopt a new clinical best practice; AI is moving that needle to the other extreme," he said. "There are almost too many good ideas, tools, and products coming through the door now, and sometimes they cause friction with one another."

To avoid friction and bottlenecks, he recommended organizations develop a streamlined process for making decisions, aimed at finding the solutions with the biggest benefits.

THE CRUCIAL ROLE OF GOVERNANCE IN AI IMPLEMENTATION

Overcoming the challenges will require organizations to focus sharply on governance throughout the AI lifecycle, from choosing the most appropriate tools and partners to conducting ongoing monitoring for bias and outcomes.

A THOUGHT LEADERSHIP ROUNDTABLE

**The future of artificial intelligence:
What will it take to revolutionize clinical care?**

CHIME
DIGITAL HEALTH LEADERS

THE CRUCIAL ROLE OF GOVERNANCE IN AI IMPLEMENTATION CONTINUED

Proper evaluation and governance of AI will be essential, especially since AI is on track to be as ubiquitous as the cloud in just a few years. The panel agreed on the importance of taking the lessons learned over the past decade about governance, security, data quality, and transparency and applying them forward to AI over the next five years. In this way, it can become a normal industry practice to rely on this technology for many different use cases.

At Stanford Healthcare, the advent of AI has led to a full reevaluation of the governance processes & structures to better position the organization for adoption, and the team has developed a testing & evaluation mechanism to identify Fair, Useful and Reliable (FURM) AI models, according to Puneet Singh Waraich, Stanford's Administrative Director of Clinical Applications.

"AI will require constant assessments and monitoring as we're all still discovering where the tangible value might lie, how best to harness it and what the associated long-term costs might be," he continued. "It also requires us to take a careful look at how our workflows interplay with AI (and vice-versa) and where potential unexpected impacts might occur via close monitoring well beyond go-lives, which is a different way of doing things than in the past. With AI, we have to be able to assess, deploy with safety, monitor, (perhaps) fail fast and pivot quickly, and strong governance and oversight are key to allowing that to happen."

ENVISIONING AN AI-DRIVEN FUTURE FOR PERSON-CENTERED CLINICAL CARE

AI is already supporting astonishing breakthroughs in clinical care delivery, and it will only bring more benefits as it matures and evolves over time, the attendees asserted.

Personalized medicine is one of the big promises of integrating AI and the clinical ecosystem. "We are going to see a massive improvement in our ability to compare treatments and outcomes across populations," Carpenter said, predicting AI will help change the trajectory of disease earlier in its development and identify the most effective therapies for those who are already in a more advanced state. "The impact on outcomes – and on overall spending – will be significant."

Curing cancer has been elusive but is now on the table. "It may not happen in this lifetime, but I am certain that AI will play a big part in curing and/or preventing more types of cancer than we can imagine right now," Daddio said. "Predictive models are going to get so powerful and accurate that we will get there, possibly a lot sooner than we thought possible even five or ten years ago."

Despite such potential, industry leaders will need to invest in developing shared best practices and guardrails to maximize the value of AI while avoiding the risks.

"It may not happen in this lifetime, but I am certain that AI will play a big part in curing and/or preventing more types of cancer than we can imagine right now. Predictive models are going to get so powerful and accurate that we will get there, possibly a lot sooner than we thought possible even five or ten years ago."

Pete Daddio

Director of Technology
Moffitt Cancer Center

A THOUGHT LEADERSHIP ROUNDTABLE
The future of artificial intelligence:
What will it take to revolutionize clinical care?


DIGITAL HEALTH LEADERS

The path forward for AI in healthcare is paved with collaboration and shared learning. While each organization faces unique challenges, the underlying goal of improving patient care through innovative technology remains universal. A central conclusion of the roundtable discussion was that by uniting around common standards and best practices, the industry can accelerate progress, minimize risks, and ensure that AI's full potential is realized for the benefit of all.

KEY TAKEAWAYS

- **Embrace the inevitable:** AI is here to stay, and healthcare organizations must proactively adapt and embrace its potential to revolutionize care delivery.
- **Balance automation with humanity:** While AI can automate routine tasks, maintaining the human touch in patient-provider relationships is essential for optimal care.
- **Collaboration is key:** Successful AI implementation requires strong partnerships between healthcare organizations, technology vendors, and other stakeholders.
- **Governance is paramount:** Robust governance frameworks are crucial for ensuring the safe, ethical, and effective use of AI in clinical care.
- **Focus on outcomes:** Ultimately, the goal of AI in healthcare is to improve patient outcomes and create a more efficient, sustainable system.



A THOUGHT LEADERSHIP ROUNDTABLE
The future of artificial intelligence:
What will it take to revolutionize clinical care?

